In The Claims

Please amend claim 10 to read:

A

10. A method according to claim 8, wherein the coding rates in the uplink and downlink directions are different

Remarks.

The points raised in items 1, 2 and 3 of the office action are addressed by the enclosed amendments to claim 10 and to Figure 2.

Regarding the rejection in item 4 of all the independent claims (claims 1,7 and 8) under 35 U.S.C. §102 for anticipation by Yamada, this is respectfully traversed, for the following reasons.

The present independent claims all include, among others, the features of encoding data at a plurality of preset data rates, and causing the coding means to reduce the data rate if the traffic at the base station exceeds a given amount. This has the advantage of reducing the number of channels used, and keeping other channels available for others to use, during busy periods. As shown in the figures and described in the specification, the source of the data can be for example a PC, a fax machine, a voice handset, or a modem.

Yamada is concerned with a different problem. Yamada is concerned with the situation that a terminal wishes to transmit a high rate data stream spread over a number of channels on a radio link, and the radio link has insufficient channels free, so that stream is completely blocked even though other users can use the few remaining free channels (lines 45-67 of col

- 1). Yamada proposes an interface which can request the terminal to reduce its source encoding rate or transmission rate, to fit the remaining free channels. Hence Yamada does not show the claimed features of:
- a) a communication system with a coding means for encoding the incoming data at a plurality of different data rates for transmission, and
- b) "if the amount of data traffic exceeds a predetermined level, thereby to increase the number of channels available."

Regarding a), Yamada is only concerned with requesting the data source to change the original rate of the data. The terminal interface circuits of figures 3 and 8 do have a data convertor circuit, 41, 93, but it is clear from the description that this is not for coding at different rates, but merely for framing the data (lines16-18 of col 3, and lines 61-63 of col 4). Regarding b) the predetermined threshold in Yamada is different, as the aim is the opposite to that of the patent. In Yamada, the threshold corresponds to the number of channels requested, and the aim is to squeeze the stream into the available free channels, which will result in fewer channels available to others, whereas in the claims, the threshold is dependent on a level which will maintain some channels free for others, so the aim is the opposite.

Considering non-obviousness in view of Yamada, a skilled person would see no reason to alter Yamada to include a coding means to change the encoding rate as this would not be necessary when used with the terminals shown which can change their source data rate.

There is no hint anywhere in Yamada suggesting they conceived the possibility of trying to interface types of terminals which cannot change their source data rate. This would require a

radical departure from the entire disclosure which refers consistently to a terminal interface which requests a terminal to reduce its data rate. Furthermore, since the aims of Yamada and of the present claims are diametrically opposed, as explained above, in the absence of any incentive, it cannot be obvious to amend Yamada to achieve the opposite aim.

Regarding the prior art cited in items 3 and 4 of the office action, none of the references cited alter these reasons, as will be explained. Battin shows encoding speech signals for a radio telephone system at rates which depend on the occupancy of the system. This again represents a solution involving changing the source data rate as in Yamada, so either on its own or in combination with other references, this cannot lead a skilled person to the present invention. Hamalainen is concerned with assigning an optimum number of time slots in a TDMA system depending on network resources. Likewise, this is concerned with accommodating given source data rates rather than adapting coding to different rates, and so either on its own or in combination with other references, this cannot lead a skilled person to the present invention. Widegren is no more relevant, as it is concerned with mapping logical connections to different channel types such as dedicated or common channels, depending on parameters such as availability of free channels.

The rejections of the dependent claims fall away as they depend on allowable main claims.

Regarding the prior art mentioned in item 5, Chiussi is concerned with ATM networks and again requests data sources to change their rates, so is not relevant for the same reasons given above with respect to Yamada.

Moulsley is concerned with adapting modulation on a downlink to suit the quality of the link.

Wallentin is concerned with dynamically adapting a connection state, such as a shared or

dedicated channel, random access or paging channel, depending on parameters such as queue lengths.

This meets all the points raised by the examiner, so favorable reconsideration is requested.

November 27, 2002

Respectfully submitted,

William M. Lee, Jr.

Registration No. 26,935

Lee, Mann, Smith, McWilliams

Sweeney & Ohlson

P.O. Box 2786

Chicago, IL 60690-2786

(312) 368-6620

(312) 368-0034 (fax)



Version With Markings Showing Amendments Made

10. A method according to claim $\underline{8}$ [7], wherein the coding rates in the uplink and downlink directions are different.

Technology Conter 2002







